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WHAT IS CLAIMED IS:

1. A circuit tape with an adhesive layer, for semiconductor devices, comprising:
a circuit tape having a base material made of a dielectric film, whereon a circuit is formed; and
an adhesive layer for connecting said circuit tape to a semiconductor element such that the circuit tape is insulated from the semiconductor element, wherein an elastic modulus of said adhesive layer, in a range of mounting reflow temperature for mounting the semiconductor element onto a mounting substrate, is more than 1 MPa.

2. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 1, wherein the elastic modulus of said adhesive layer, in the range of 200°-250°C, is more than 1 MPa.

3. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 1, wherein said adhesive layer is composed of an adhesive film.

4. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 3, wherein said adhesive film includes a three-layer structure having a porous support layer and two adhesive layers which are respectively applied onto both sides of said porous support layer.

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5. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 3, wherein said adhesive film includes a structure wherein an adhesive agent is impregnated into a porous support.

6. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 3, wherein an elastic modulus of said adhesive film at room temperature is equal to or less than 4000 MPa.

7. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 1, wherein an elastic modulus of the adhesive layer at room temperature is lower than the elastic modulus of said adhesive layer in a temperature range of 200°-250°C.

8. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 1, wherein the adhesive layer has a layer of a thermoplastic resin, and the thermoplastic resin has a glass transition temperature greater than 250°C.

9. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 1, wherein material of the adhesive layer has a coefficient of moisture absorption at 85°C/85% RH for 168 hours of, at most, 3%.

10. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 1, wherein the circuit tape has an uneven surface with spaces

between portions of the circuit, and the adhesive layer fills in the spaces.

11. A circuit tape with an adhesive layer, for semiconductor devices, comprising:

an elongated circuit tape having a base material made of dielectric film, whereon circuits are formed; and

at least one adhesive film each adhered continuously to said circuit tape, each adhesive film having a size less than that of the elongated circuit tape.

12. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 11, wherein an elastic modulus of said adhesive film, in a range of mounting reflow temperature for mounting a semiconductor element onto a mounting substrate, is more than 1 MPa.

13. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 12, wherein an elastic modulus of said adhesive film, in the range of 200°-250°C, is more than 1 MPa.

14. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 11, wherein said adhesive film includes a three-layer structure having a support layer and two adhesive layers which are respectively applied onto both sides of said support layer.

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15. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 11, wherein said adhesive film includes a structure wherein an adhesive agent is impregnated into a porous support.

16. A circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 12, wherein an elastic modulus of said adhesive film, at room temperature, is equal to or less than 4000 MPa.

17. A method of manufacturing a circuit tape with an adhesive layer, for semiconductor devices, comprising the steps of:

transferring an elongated circuit tape, whereon a circuit is formed, from a first reel to a second reel;

punching out adhesive film of a size smaller than that of the elongated circuit tape; and

adhering continuously the punched-out adhesive film to said circuit tape, as the circuit tape is transferred from the first reel to the second reel, concurrently with the punching.

18. A method of manufacturing circuit tape with an adhesive layer, for semiconductor devices, as claimed in claim 17, wherein said punched-out adhesive film is punched out from an elongated adhesive film transferred from a first reel to a second reel.

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19. Adhesive film for semiconductor devices, which is for adhering a semiconductor element to circuit tape, having an elastic modulus, in a range of mounting reflow temperature for mounting the semiconductor element onto a mounting substrate, of more than 1 MPa.

20. Adhesive film for semiconductor devices as claimed in claim 19, wherein said mounting reflow temperature is in a range of 200°C-250°C, said elastic modulus of the adhesive film, in the range of 200°C-250°C, being more than 1 MPa.

21. Adhesive film for semiconductor devices as claimed in claim 19, wherein said elastic modulus at room temperature is equal to or less than 4000 MPa.

22. Adhesive film for semiconductor devices as claimed in claim 19, wherein said adhesive film includes a three-layer structure having a support layer and two adhesive agent layers which are applied respectively onto both sides of said support layer.

23. Adhesive film for semiconductor devices as claimed in claim 19, wherein said adhesive film has a structure wherein an adhesive agent is impregnated into a porous support.

24. A circuit tape with an adhesive layer, for semiconductor devices, comprising:

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a circuit tape having a base material made of a dielectric film, whereon a circuit is formed; and

an adhesive layer for connecting said circuit tape to a semiconductor element such that the circuit tape is insulated from the semiconductor element, wherein

said adhesive layer includes a thermosetting resin closest to the circuit tape and a thermoplastic resin to be closest to the semiconductor element, and

an elastic modulus of said adhesive layer, in a range of mounting reflow temperature for mounting the semiconductor element onto a mounting substrate, is more than 1 MPa.